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**AUG 28 2007**HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 10015382-4**IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE**Inventor(s): **Buswell et al.**

Confirmation No.: 3678

Application No.: 10/642,872

Examiner: Anita Karen Alanko

Filing Date: 08/18/2003

Group Art Unit: 1765

Title: **Slotted Substrate and Method of Making**Mail Stop Appeal Brief - Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450**TRANSMITTAL OF REPLY BRIEF**Transmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on June 28, 2007.

This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)

No fee is required for filing of this Reply Brief.

If any fees are required please charge Deposit Account 08-2025.

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Typed Name: Doreen Zabinski  
Signature: Doreen Zabinski

Respectfully submitted,

Buswell et al.

By Petar Kraguljac

Petar Kraguljac

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Reg No. : 38,520

Date : 08/28/2007

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PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:	)	Examiner: Anita Karen Alanko
Buswell et al.	)	
	)	Art Unit: 1765
Serial No.: 10/642,872	)	
	)	
Filed: August 18, 2003	)	
	)	
For: SLOTTED SUBSTRATE AND	)	
METHOD OF MAKING	)	
	)	
Date of Last Office Action:	)	Attorney Docket No.:
June 13, 2006	)	10015382-4
	)	
Date of Examiner's Answer	)	
June 28, 2007	)	
	)	

August 28, 2007

**REPLY BRIEF under 37 CFR §41.41**

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:


This Reply Brief is timely provided within two months from the mailing date of the Examiner's Answer dated June 28, 2007.

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**CERTIFICATE OF FACSIMILE**

Date of Deposit: August 28, 2007

I hereby certify that these papers are being transmitted to The Patent and Trademark Office facsimile number (571) 273-8300 on August 28, 2007.

  
Dorcen Zabinski

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Reply

In response to the Examiner's Answer, dated June 28, 2007, Appellant respectfully submits the following reply as permitted under 37 CFR §41.41(a)(1). The Examiner's Answer contained no new grounds of rejection and this response contains no new amendment, affidavit or other evidence. The following sections address the Examiner's Answer starting on page 6 under section (10) "Response to Argument."

I. Baughman et al.

Claim 1

The examiner's position relies heavily on a comparison of Fig. 5c of the present application and Fig. 5C of Baughman. However, the reliance on Baughman is misplaced and the figures show two different cross-section views. As seen from the present application, Fig. 5c is a cross-section through terminal regions 503c, 504c, and 505c at the ends of slots 503, 504, and 505, respectively (see Fig. 5 for an indication of the cross-section view). Fig. 5C of Baughman, however, is not through a terminal region of slot 18a. Rather, it is a cross-section view through a central, non-terminal, non-end region of the slot. See for example Fig. 5D that is the final view in the series and it shows the cross-section is through nozzles 20. Then looking to Figure 1 of Baughman, a cross-section through the nozzle 20 and slot 18a is in a central, non-terminal, non-end region of the slot 18a.

Therefore the comparison of Fig. 5c of the present application and Fig. 5C of Baughman is irrelevant and not on point. Overall, the examiner's reliance on Baughman is based on figures that illustrate a central portion of a slot and do not relate to forming a terminal region of a slot. Thus the reasoning of the rejections is irrelevant and not on point. Indeed, it appears that inappropriate hindsight is being used to create teachings in Baughman using the claims as a blueprint. Baughman fails to teach each and every element of claim 1

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and fails to establish a prima facie anticipation rejection. Appellant repeats all previous arguments. The rejections are invalid and cannot stand.

Similarly, the misplaced reliance on Baughman is carried to all other claims and forms invalid rejections. Baughman fails to establish a prima facie anticipation rejection of any claim and the rejections should be reversed.

Independent Claim 20

Claim 20 recites:

"forming two terminal regions of the slot into the first surface generally contiguous with and interposed by the central region, each of the two terminal regions having a width at the first surface taken generally orthogonal to a long axis of the slot that is greater than a width of the central region at the first surface taken generally orthogonal to the long axis of the slot."

Discussing Baughman Fig. 5C, the examiner states that "[t]hus the width at the first surface is the same width that it is everywhere, as defined by sidewalls 18." (Examiner's Answer, page 11, lines 5-6). However, claim 20 explicitly recites "the two terminal regions having a width at the first surface taken generally orthogonal to a long axis of the slot that is greater than a width of the central region at the first surface..." Thus, the width at the first surface is not the same width as it is everywhere. The examiner's admission proves Baughman does not anticipate the claim and the anticipation rejection is invalid. The rejection cannot stand.

II. Soik

No additional arguments are provided in the Examiner's Answer regarding Soik beyond the final rejection. Thus Appellant repeats the arguments of the Appeal Brief. The reliance on Soik is misplaced and fails to establish a prima facie anticipation rejection. The rejections cannot stand.

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Whether Soik U.S. Patent No. 6,745,469 is Non-Analogous Art

MPEP 2141.01(a) "Analogous and Non Analogous Art", section I states:

"In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

The Examiner's Answer on page 12 does not rebut or address the requirements of MPEP 2141.01(a). The Answer argues that the claims do not recite the purpose for the slot and that the claims are not limited to a particular size of the slot (Examiner's Answer page 12). These arguments are do not make a case for what is analogous art under MPEP 2141.01(a) and are not on point. Appellant repeats the arguments of the Appeal Brief. Soik is non-analogous art and is an improper reference. All rejections based on Soik are improper and cannot stand.

Ascertaining the level of ordinary skill in the art under MPEP §2141.03

The Examiner's Answer states that,

"The claims are directed to forming a slot by mechanical and chemical techniques. The level of skill would be that of knowing [sic] how to form slots by drilling, laser machining, or etching." (Examiner's Answer, page 12).

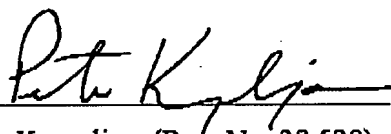
This statement trivializes the present application and is inaccurate. Under this view, one of ordinary skill in the art can be a person who drills slots in a block of wood in their garage. To the contrary, the present application and the inventor's field of endeavor is forming highly precise semiconductor substrates for inkjet print heads or other fluid ejecting devices. This is a complex process and requires high degrees of accuracy. Exemplary substrates can have a thickness of less than 100 microns (specification, page 7, paragraph [0028]). Thus, the level of ordinary skill in the art has still not been properly ascertained. All rejections are improper for at least this reason and cannot stand.

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**AUG 28 2007****Conclusion**

Appellant respectfully maintains and repeats all previous arguments from the Appeal Brief and those presented herein, which show the deficiencies in the rejections. Accordingly, Appellant respectfully requests that the Board of Appeals overturn all rejections and allow all pending claims.

Respectfully submitted,



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